Figure 5. Rollins trench profile photo, vertical height exaggerated.

Originating within this stratum (not in the shell above) and extending into sterile tan sand was a series of subcircular features (Figures 6 and 7). Each of these features was photographed, mapped, bisected, and profiled at the top of sterile sand, at ca. 1.70 mbs. Once profiled, the features resolved into two groups. Features 7, 8, 10, 11, 12, and Area 15 contained a similar fill of mixed brown to grayish brown sand. Features 8 and 12 had small amounts of shell at their surfaces but the shell did not extend deeply into the feature fill. This shell may have been introduced from the base of Feature 1 by root or rodent disturbance. At the base each of these features, circular to subcircular areas of sand heavily mixed with particulate charcoal were encountered. These were about 10 cm in diameter and between two and five cm deep. These shallow pits did not extend far below the base of the earth midden (Figure 7), with the exception of Feature 12, which also had the least charcoal at the base. Feature function is unknown. They were probably not postholes with post bases burned in situ, because no wood grain was evident in the charcoal. They also were not pits used for cooking with baked clay objects, as not a single baked clay object or object fragment has been recovered from Rollins. These features may have been some other kind of roasting or steaming pits, smudge pits, or they could have been used to burn some kind of organic offerings[8].

The second set of features, Features 5, 6, and 9, also had predominantly brown sand fills. Features 5 and 6 were shallow; Feature 5 had a concave base with some evidence of root disturbance while Feature 6 had a flat base just 10 cm below the base of the earth midden and may reflect a dip in the original ground surface. Shell at the top of Feature 6 did extend into the feature fill and was given a separate feature number, Feature 6a. It was profiled in the trench wall (D3), and may be root or rodent disturbance. In contrast, Feature 9 was a deep pit, extending 60 cm below the base of the earth midden. There was no evidence of burning associated with this feature. It may have been a storage pit. A separate, smaller shell-filled pit intruded into Feature 9 and indicates subsequent, possibly unrelated activity in the same area.

Finally, after removal of the earth midden throughout the trench—when most of the trench floor was in yellowish brown (10YR5/6) sterile sand—an apparently circular area of dark grayish brown earth midden remained in the western units (Units 3, 5, and 7) (Figure 6). The size and shape of this feature (Feature 13) suggested that it might be a house floor, though no postholes were visible. In order to more fully explore the feature configuration, a 1 x 1 m unit, Unit 9, was opened on the north wall of the trench (Unit 5, east ½). When the unit was brought level with the trench, it was clear that Feature 13 did not extend north of the trench. Rather, at the base of Level 18 (1.80 mbs; below Feature 3), soils in Unit 9 still contained shell and bone. Soil texture was "sticky" (field forms, on file, LSUMNS) and a small area along the north wall may have contained ash. Sterile sand appeared in the next level. While this unit revealed no new information on Feature 13, the area certainly should be explored in the future. Within the trench, Feature 13 bottomed out within 10 cm of its identification. The wall profiles indicate that it was simply a distractingly regular, low area of the earth midden which followed the slope of the underlying C horizon sands.

Given the modest size of our window into the feature assemblage, activities prior to ring construction remain unclear. At present, it can only be affirmed that the ring was built on a site previously used by Orange peoples in a way that resulted in negligible shell deposition, at least in the area under the subsequent ring. It is unclear whether these activities were related to site clearing or other site preparation activities that just preceded ring construction or whether they were much earlier—radiocarbon and other dating and an attempt at cross-mending sherds between proveniences cannot completely resolve this question (see below). However, similar features were found nowhere else on site except immediately beneath the ring. In fact, these features do not cover the same area as the latest ring stratum, Zone 1, but appear only in the area below Features 1 and 3. This areal congruence between the underlying features and the ring core strongly suggests that they are related to subsequent ring deposition.

A summary of site formation processes as seen in the south trench profile is presented in Figure 8[9]. Note that for this figure, I have excluded the last two meters on either end of the trench, which pertain to the sequential relationship of A2 (Zone 1SB) to the other features in the trench; this remains unclear. In addition, I have "smoothed" the conjunctions between some deposits and removed disturbances until the final depositional episode.

Initial activity in the location of the ring included the deposition of an earth midden containing pottery and bone, and only minor amounts of shell, on a pre-existing sand ridge. During the accretion of this earth midden, numerous pits were dug. Shortly thereafter (based on pottery crossmending—see below), shell deposition began with a thin lens in the center of the ring area. This deposit consisted of whole and crushed oyster and may have been trampled into the pre-existing dark, organically-enriched sand. Because it was hard to distinguish from some subsequent deposits, the horizontal extent of this lens is unclear and so is marked with dashed lines. Immediately thereafter, the first deposit of Feature 1 was made. The second and third deposits (Episodes 4 and 5) of the same whole shell, numerous small fish bone, and virtually no soil, separated by thin lenses of sand or sand and clay, followed shortly. Once this initial pile was completed, shell and earth middens (Episodes 6 and 7; Episode 6 and 1 were difficult to distinguish and may be conflated) were deposited on the interior and exterior slopes of the ring, perhaps to stabilize the extremely loose shell in Feature 1. (This stratum is missing from the ring interior of the south wall, where Feature 3 and Feature 1 abut.) Feature 3 East and West were then deposited on the interior and exterior of the ring[10]. Finally, Zone 1 overlay all these features (Episode 9). As noted, Zone 1 has a very different character than Features 1 and 3, and may have resulted from different activities than those that produced Features 1 and 3.

Feature 1 and Feature 3 probably represent feasting remains. Hayden (2001) noted that archaeological evidence for feasting could be distinguished by "feasting middens" in

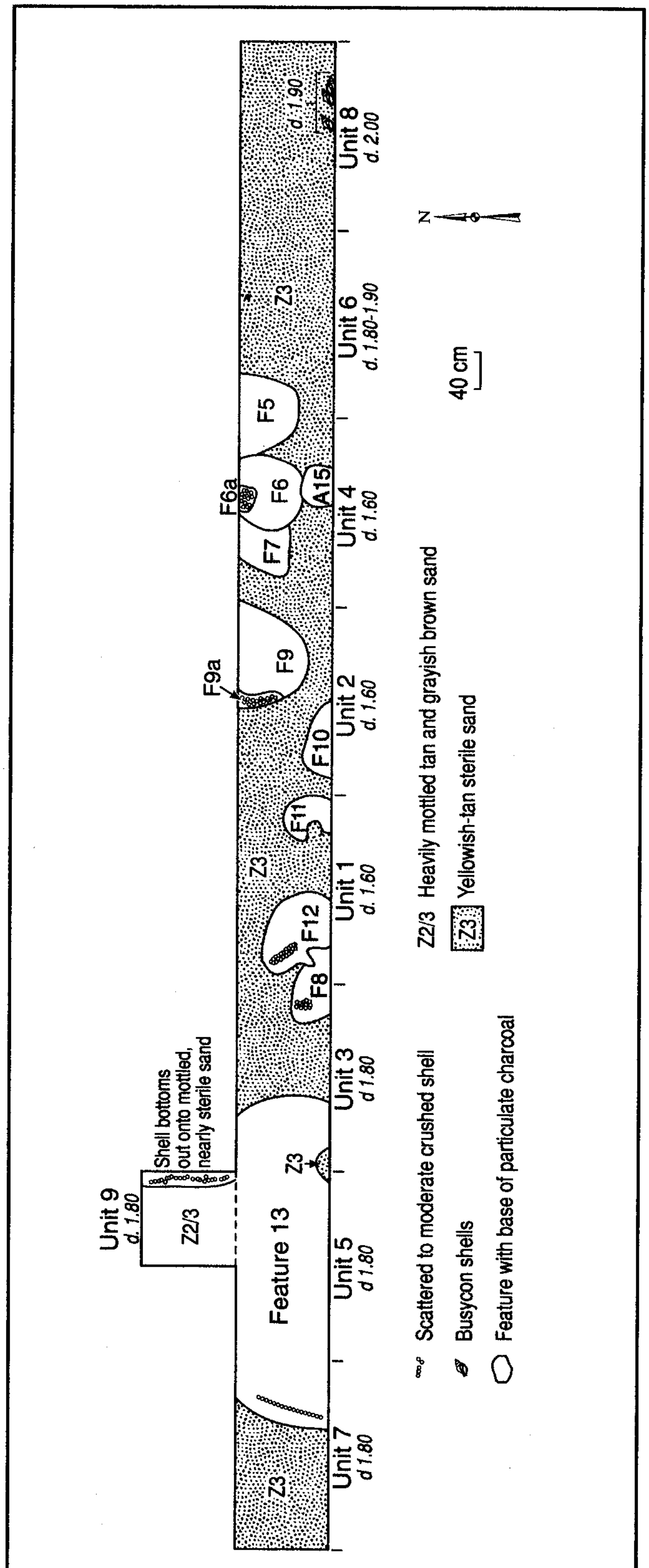

Figure 6. Rollins trench, floor plan at top of sterile sands, elevations as indicated.

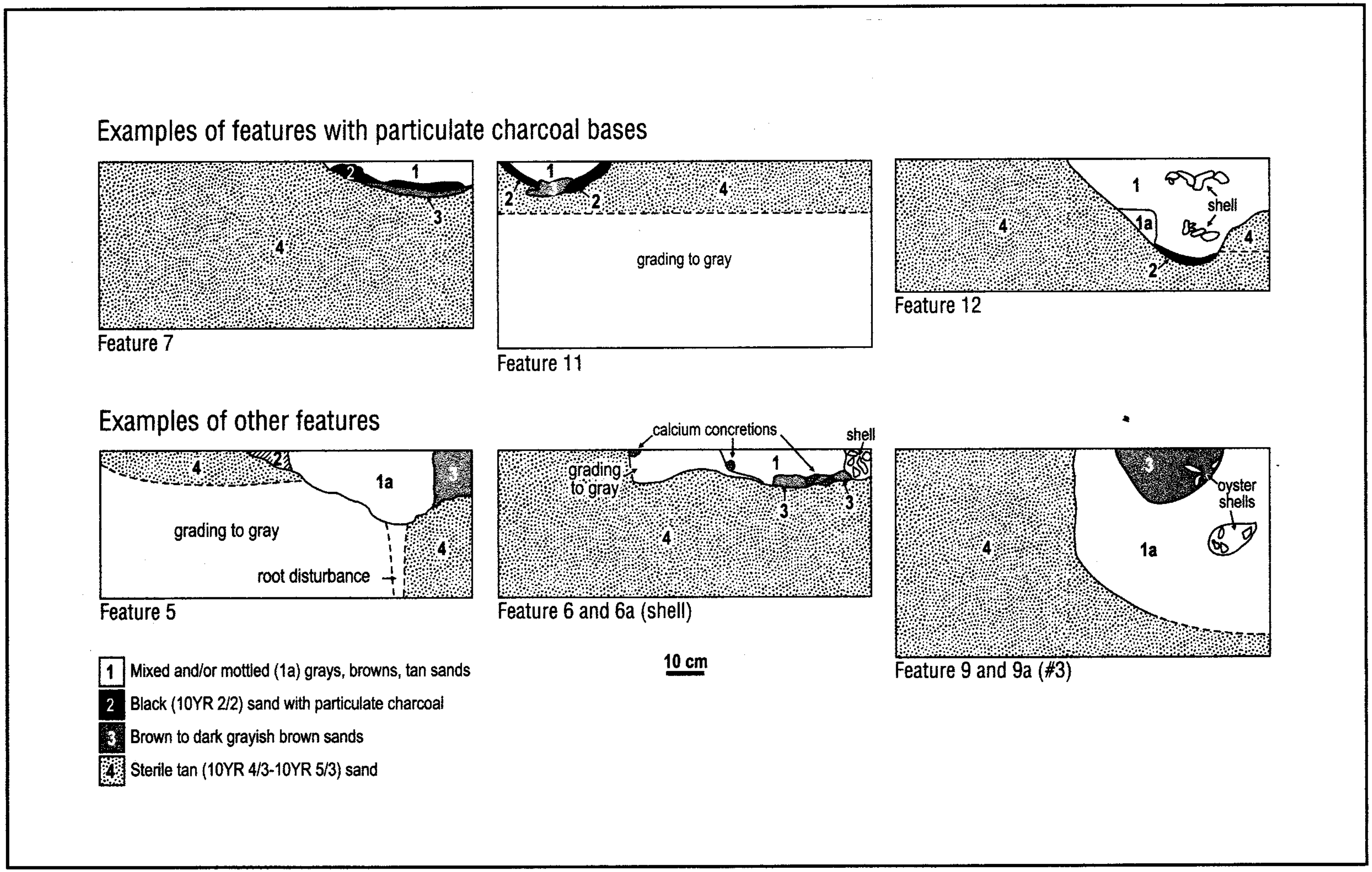

Figure 7. Selected feature profiles from the Rollins trench. Profiled at top of sterile sand, ca. 1.70 mbs.

Table 3. OCR[1] dates from Rollins Shell Ring.

FS #	Description	Date
456	Trench 1, Unit 1, F12. 1.90-1.93 cm bs	3839 +/- 115
459	Trench 1, Unit 1, F11. 1.97-2.00 cm bs	3830 +/- 114
506MS21	Trench 1, Unit 2. Top of earth midden below F1, 1.30-1.33 cm bs	3888 +/- 116
507MS22	Trench 1, Unit 5. Top of earth midden below shell midden, 1.60-1.63 cm bs	3855 +/- 115

1. OCR (oxydizable carbon ratio) dates are based on the fact that, unlike much organic matter, charcoal and the humic material in soil degrade only very slowly through time (Frink 1995, 1997). As these substances degrade, the relative percentage of easily oxidizable carbon increases. An OCR date is based on the ratio of the relatively inert versus the readily oxidizable carbons present in soils or charcoal. The advantage of OCR dates is that most soils can be dated; the procedure is not dependent on amounts of organic matter that would be necessary for conventional radiocarbon dating. Another advantage is cost, which is $50/sample. Though despised by the operators of radiocarbon labs, the procedure has been tested against hundreds of radiocarbon dates. Where a number of 1 would equal complete agreement and 0 no agreement between the two procedures, these tests indicate agreement at a value of 0.98 (Frink 1995). For more information or to submit samples, go to http:// members.aol.com/dsfrink/ocr/ocrpage.htm.

which single deposits contain massive amounts of food remains. While the horizontal extent of Feature 1 and related deposits is unknown, it is telling that similar deposits were found in the Russo's 1992 Unit 4850N250E, about 15 m north and west of the trench.

Radiocarbon and OCR dating

Radiocarbon and OCR dates are presented in Tables 1 and 3 and Figure 9. The oldest date on the site is from Feature 11, which had a calibrated intercept of 4089 cal B.P. (see Table 1 for calibrated ranges and other information). The bulk carbon radiocarbon date from Feature 11 is older than the OCR date on the feature (Table 3), but single sigmas overlap[11]. Indeed, all four OCR dates from the subring features and the top of the earth midden are essentially contemporaneous, and suggest that initial use of the ridge dates to ca. 3850 B.P.[12].

Shell from the base of Feature 1 was radiocarbon dated to 3617 – 3449 cal B.P. (1 sigma) This suggests that the earth midden might be somewhat older than the initial shell deposits—that there may have been a hiatus in site use between the two proveniences. However, the dates from the earth midden and the base of Feature 1 overlap at two sigma, so site use may have been continuous. Certainly pottery from all three strata, Zone 1, Feature 1, and the earth midden, appear similar, so occupations did not straddle Orange phases. Pottery cross-mending was undertaken to answer questions about the temporal relationship of proveniences on the site. For pottery over 3 cm (n = 801), only six crossmends between proveniences were found. One of these, between Feature 1 in Level 12 and Zone 2/1 (one of a series of transitional zones near the base of the earth midden) in Level 14, suggests contemporaneity between the earth midden and Feature 1, but more crossmends would be more persuasive. A corrected, calibrated shell sample from the top of Feature 1 dated to cal 3518 – 3375 cal B.P. (1 sigma), nearly contemporaneous with the basal deposit. This, along with the stratigraphic implications for dumping of massive piles of food remains, indicates a rapid build-up of this part of the main ridge.

Was Rollins Shell Ring a Feasting Site?

Rollins Shell Ring is a unique site for the Orange III period in the area between the Nassau and St. Johns Rivers. The ring is a large, topographically complex construction that cannot be explained with reference to simple egalitarian village plans. Radiocarbon dating suggests that the ring was constructed quickly; top and bottom dates for the core of the ring were separated only by some 50-100 years (but could also be considered contemporaneous).

Is the ring the result of ritual involving feasting, or everyday discard? I argue for the former. The evidence for this includes: site context (it is the only Orange III ring in the lower St. Johns drainage); intrasite organization suggesting purposeful maintenance of a ring structure throughout the occupation of the site; and deposits indicating purposeful mounding and little evidence of post-depositional crushing. On the basis of this and other evidence, it appears that Rollins was a special purpose site where Orange III culture populations of the area aggregated seasonally for feasting and other activities. The ring itself was probably constructed from the remains of these feasts, piled up as a display of the success of the corporate group (cf. Russo et al. 2002). Elsewhere, I have presented evidence indicating strong seasonality in the Rollins feasting deposits (Saunders 2003; see also Russo 2002 for seasonality at the Fig Island Ring Complex) and demonstrated that the frequency of decorated pottery is much higher at Rollins than at contemporaneous, sheet midden sites (Saunders 2003, 2004). Taken together, these data strongly suggest a special purpose site.

That the ring constituted a separate facility for feasting and other macroband activities is consistent with cross-cultural comparative studies that demonstrate an association between feasting and spatial differentiation; in other words, feasting is

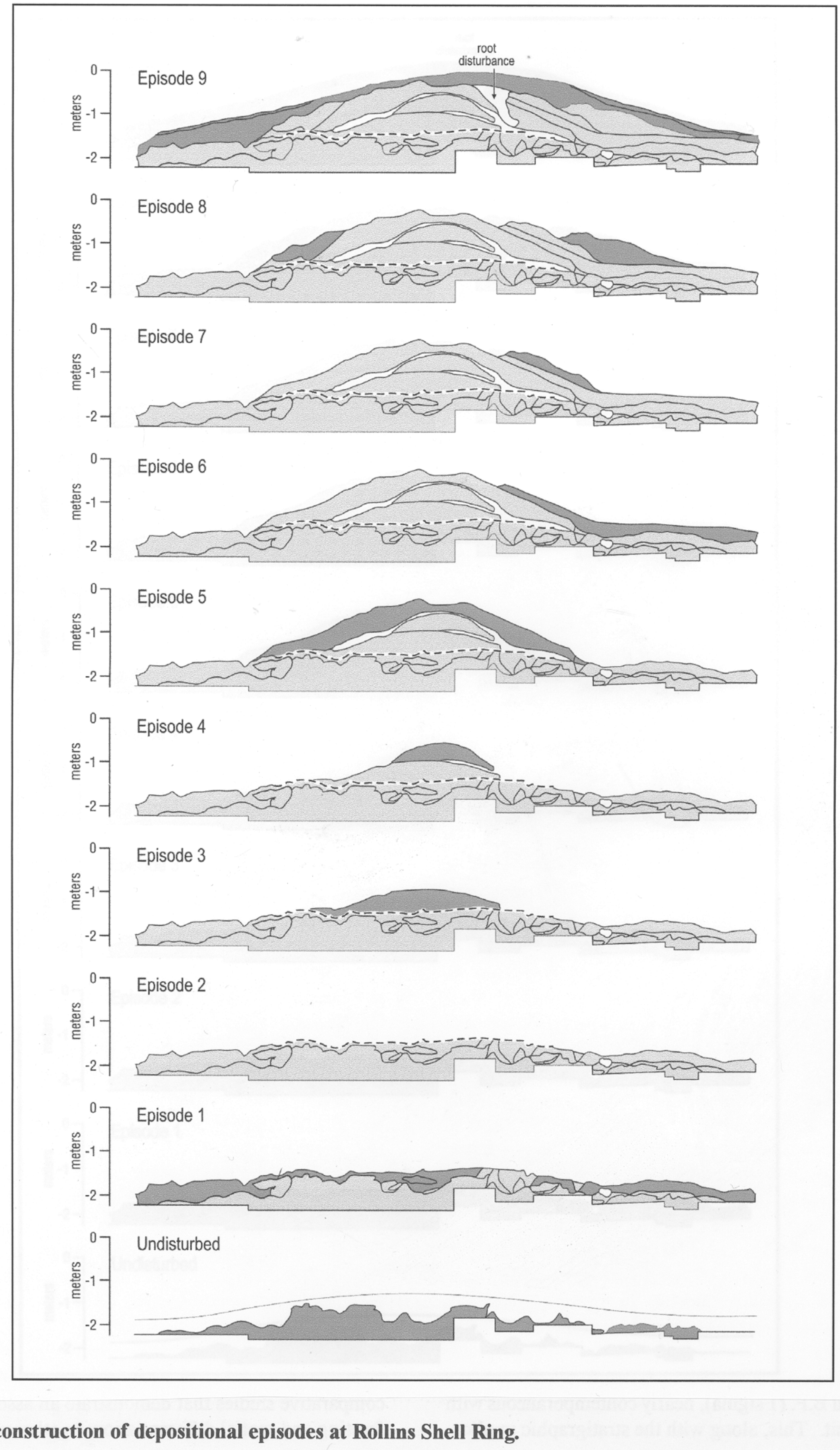

Figure 8. Reconstruction of depositional episodes at Rollins Shell Ring.

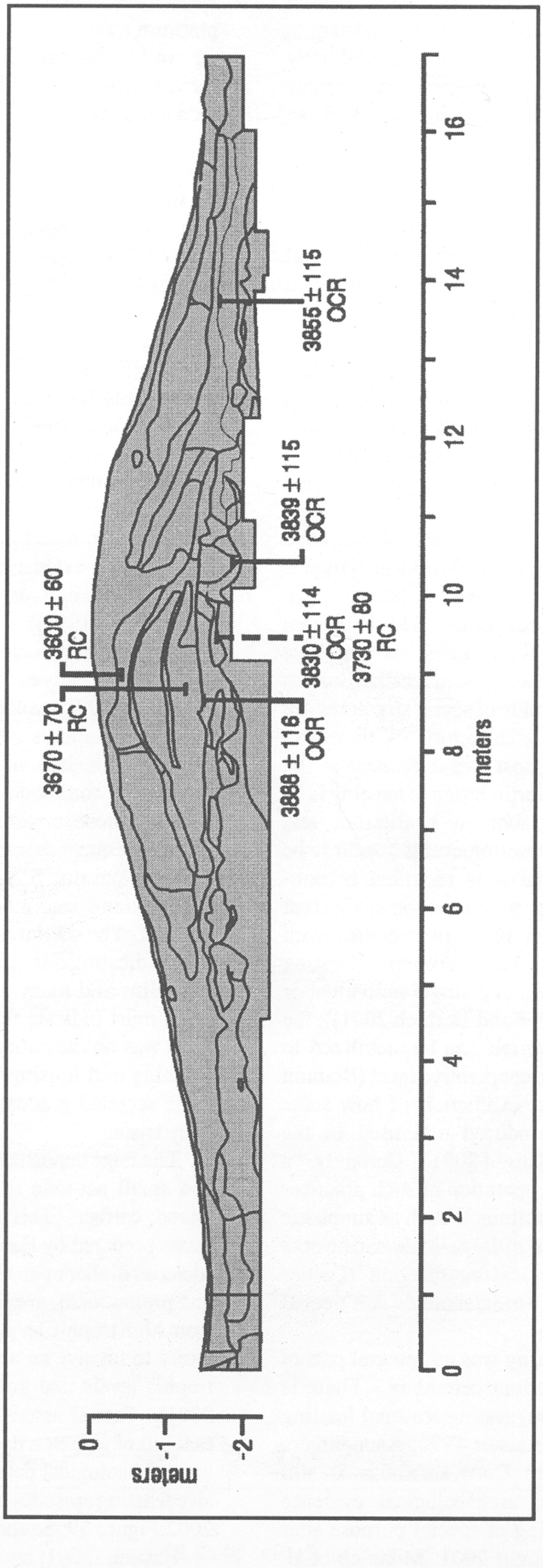

Figure 9. Radiocarbon and Oxydizable Carbon Ratio (OCR) dates from Rollins Trench 1 (RC dates are corrected, not calibrated; see Table 1 for calibrated dates).

often done in special structures spatially separated from domestic or village life (Adler and Wilshusen 1990; Deitler and Hayden 2001; Hayden 2001). Indeed, "it is important to emphasize that not only were these structures specially constructed sites for feasting, but they were most probably constructed through feasting. That is, the more marked the architectonic elaboration, the more such features represent the congealed labor of work feasts and are, in effect, an advertisement of the feasts that went into their construction" (Dietler and Hayden 2001:9). This labor, over and above that necessary for simple function, qualifies shell rings as monumental architecture. According to Trigger (1990), monumental architecture is conspicuous consumption; at rings, consumption is made conspicuous.

This has been a subject of debate for some time (e.g., Cable 1997; Trinkley 1985). Rejection of the idea that shell rings were a form of monumental architecture is based on both theoretical preconceptions and the general unavailability of data on the rings themselves. Each of these is examined briefly below.

Until recently, unilineal theories of cultural evolution have reserved monumental architecture for hierarchical societies with an ascribed elite (agriculture was slowly withdrawn from this equation over the last twenty years or so). This elite class was needed (theoretically) to control (or cajole) labor for these projects. However, an infusion of theory from feasting studies is changing conceptions of what kinds of social structures are necessary to produce monumental architecture. With respect to ring construction, perhaps the most useful element of the anthropological description and interpretation of feasting is its use as a means to mobilize labor in egalitarian and transegalitarian societies. In fact, feasting events appear to be the principal means by which labor is recruited in non-capitalist societies. While it is important to acknowledge that feasting is also used to mobilize labor in societies with ascribed positions of power (or, more properly, feasting justifies the use of labor for the gain of a single individual or an elite class of people [e.g., Dietler and Herbich 2001]), the recognition that large groups of people can be mobilized to perform tasks on a more corporate, cooperative level (Blanton et al. 1996) has promulgated a re-evaluation of how some monumental architecture was produced and used in the southeastern United States (e.g., Knight 2001). Certainly, "a fuller awareness of the range and operation of such practices exposes the inadequacies of assumptions. . .such as simplistic correlations between the existence of large-scale earthworks and the necessity of centralized political organization" (Dietler and Herbich 2001:257). In other words, mounds don't equal chiefs (Gibson 2001).

There is no question that feasting was an integral part of southeastern Native American Indian ceremony. There is ample ethnohistoric information suggesting seasonal feasting (e.g., Le Page Du Pratz 1972; Hudson 1976; Laudonnière 1975; Swanton 1979); the Green Corn ceremony is still performed today. In addition, archaeological evidence suggests deep antiquity for feasting at special purpose sites (e.g., Blitz 1993; Kelly 2001; Knight 2001; Milanich et al. 1997; Smith and Williams 1994; VanDerwarker 1999). Recently Knight (2001) has re-interpreted Middle Woodland platform mounds as fundamental to ceremonialism centering on world renewal and feasting. Shell rings, constructed through feasting, may well be antecedent to these more widely recognized monuments.

The monumentality of rings may also have been overlooked because of the paucity of readily available information on site structure, stratification, and other important information on rings. Shell rings were excluded by the adjective "earthen" in a 1998 volume on ancient enclosures—sacred and secular—of the eastern Woodlands (Mainfort and Sullivan 1998). In that volume, Poverty Point is cited as the earliest enclosure (Mainfort and Sullivan 1998:2), though dates from shell rings are up to 500 years earlier[13]. With the exception of Waring and Larson's (1968) work on the Sapelo Shell Ring complex, and Trinkley's (1985) influential article on rings as egalitarian village sites, most information on ring excavations is either unpublished or buried in reports with limited distributions (see Saunders 2002a for a review)[14]. In addition, until very recently, research on Atlantic coastal rings had stalled, with no new, extensive excavations conducted between 1979 and 1998 (though, as noted, Rollins was tested by Russo in 1991 [Russo 1993]).

A review of previous excavations and comparison of results with more recently excavated material from Rollins (Russo and Saunders 1999; Saunders 1999) and the Fig Island Shell Ring complex (Saunders 2002b) indicated a fairly diverse assemblage of ring sizes and shapes (Russo and Heide 2001), but also some commonalities of ring composition (Saunders 2002a). Most important for considerations of ring function was the frequent description of "loose, clean, whole oyster" as the principal ring fill in at least six ring sites. At Rollins and at Fig Island, enormous deposits of loose whole oyster were mapped. The shell in these deposits was oriented every which way, indicating dumping; this dumping, along with the height of Rollins and many other rings (Fig Island 1 is almost 7 m high) must indicate that mounding was deliberate. Further, there was no indication at either Rollins or Fig Island of the crushing and lensing that would occur if the surfaces of the rings accreted gradually over time and were inhabited on a daily basis.

The huge deposits of shell contained predominantly oyster and small net-able fishes—at Rollins, scianids, and at Fig Island, catfish. This conforms to the menu for cooperative feasts prepared by Hayden (2001). While feasting menus for societies higher up the food chain, where feasts are competitive and promotional, are likely to involve unusual or scarce foods from high trophic levels, more egalitarian, solidarity feasts are likely to involve an abundance of common foods from lower trophic levels that are resistant to overexploitation (Hayden 2001). Faunal assemblages from Rollins and Fig Island fit that bill of fare exactly. And the bulk of the stratigraphic and zooarchaeological data from what are presumed to be successive feasting episodes indicate highly seasonal deposits (Russo 2002:Figure 39; Saunders 2003).

Hayden (2001; among others) also suggested that serving vessels at feasting sites might be of unusual quality or size. This has been demonstrated at many sites of many different time periods in the Southeast. Blitz (1993) demonstrated that Mississippian "big shots" had big pots at the Lubbock Creek site in Alabama; Knight (2001) cites examples of special purpose wares at several Middle Woodland mound sites. As noted above, the Rollins assemblage is distinctive in its high frequency of decorated wares. The vessel assemblage, with its concentration on shallow bowls, may indicate the predominance of serving bowls.

Conclusion

The Rollins Shell Ring site is most likely an example of early monumental architecture, one of over 30 known examples, along the lower Atlantic coast. It joins a growing number of other recently recognized examples of Middle and Late Archaic monumental architecture in the Southeast. Over 20 Archaic earthen mound sites are known in the Lower Mississippi River Valley and there are numerous Archaic shell and earthen mounds in Florida as well (Russo 1996). Just how labor was mobilized to construct these monuments, not to mention why they were constructed, remains a mystery (see Gibson and Carr 2004 for a range of opinions). However, there does seem to be an emerging consensus that at least some Archaic mound (including ring) construction could have been a cooperative effort requiring little in the way of status hierarchy to mobilize the labor force. At smaller, unelaborated rings, construction was probably achieved through combining the labor with feasting, religious ceremony, music, dancing, mate selection, and gossip (information exchange). Access to ring activities appears to have been more or less unrestricted and the entire affair probably had an incorporative function. However, the variability in ring configuration and size suggests that some societies may have upped the ante. In particular, the addition of ringlets, which would admit only a fraction of the population that could participate in activities in the main ring, may indicate increasingly[15] restrictive entry into some areas and, by extension, increasing social differentiation. The configuration of rings may be some of our earliest evidence for social stratification, though this hypothesis will take much additional work to confirm.

Notes

[1] For other criticism of Trinkley's hypothesis, see Russo and Heide (2003).

[2] Though Cable believed the sites around Sewee to be Late Archaic, survey reports suggest only Mississippi Period occupations around Sewee (Michael Russo, personal communication, 2003).

[3] Sterile sand exposed in the base of the trench was higher under the shell than on either the interior or the exterior of the ring. This may indicate that a portion of the ring was built on a naturally occurring ridge. Alternatively, the shell may have protected the original C-horizon sands from erosion by wind or water (Michael Russo, personal communication, 2003) or from being swept away or compacted by cultural activities. In either event, the "ridge" would then be a remnant of the original C-horizon elevation.

[4] These ringlets were so unusual with respect to known ring configurations at the time Rollins was excavated, that plantation period or modern shell borrowing were suspected to have produced those irregular shapes. The soils analysis was designed to address this, as well as whether or not shell once extended across the ring opening. Results indicated that no shell borrowing had taken place in the areas tested. Subsequent to our investigations, two other sites (Fig Island Ring Complex [38CH42] and Sewee Shell Ring [38CH45] have been mapped with ringlets.

[5] In the nomenclature used here, "Features" are the result of discrete episodes of human behavior. "Areas" are less surely so, and could be the result of human or natural processes. "Zones" are the general soil matrix. All Features, Areas, and Zones were excavated separately.

[6] Profiles were drawn according to microstrata observed in the walls; we intentionally did not impose features or areas as mapped in plan onto the walls. Similarly, we explicitly avoided imposing a depositional sequence on the deposits observed in profile.

[7] Pot dumps are small (ca. 20-30 cm diameter) areas of shell, usually coquina or periwinkle, that appear to have been dumped from a cooking pot after broth has been made.

[8] Features with evidence of heating or burning have been found at the bases of Archaic mounds in Louisiana (Saunders 1994).

[9] Russo and Heide (2003) should be credited for creating the first "sequence profiles" for Rollins. My interpretation of the stratigraphic sequence, which is based on field forms as well as the final profiles, differs from theirs (Russo and Heide 2003:Figure 20) and one they attributed to me (Russo and Heide 2003:Figure 21).

[10] As mapped, Feature 3 E on the south wall appears to have been deposited before or at the same time as the last episode of Feature 1. The appearance of Feature 3 E on the north wall, and Feature 3 W and W on the north and south wall, argues against this conclusion.

[11] These OCR dates have relatively large sigmas because the samples were 2-3 cm deep (Douglas Frink, personal communication, 1999). Ideally, samples should be ca. 1 cm thick. Note also that OCR dates have the highest correlation with calibrated intercept of a radiocarbon date (Douglas Frink, personal communication, 2003).

[12] Two dates, one from the top of Unit 3197 (FS #467) and one from a feature in Ringlet J (FS #281) indicate late Orange period activity at portions of the site. This may account for some of the shell crushing observed in Unit 3197.

[13] Watson Brake (16OU175), with calibrated intercept dates from mound bases as early as 5600 B.P. (Saunders et al. 1994), currently has the distinction as the earliest enclosure; Middle Archaic mounds in the lower Mississippi River Valley may date as early as 7000 B.P. (Russo 1996).

[14] This is more of that gray literature, but a CD of the report is available from the author.

[15] The two proveniences dated from a ringlet associated with the Fig Island 1 shell ring (38CH42) were ca. 200 years younger than the dates from the main ring (Saunders 2002b:Table 7).

Acknowledgments

The research presented here was funded through the National Geographic Society Research and Exploration program, Grant # 6018-97. In addition, we had logistical support from Talbot Island State Park and the participation of numerous volunteers. Thanks to everyone involved.

References Cited

Adler, M.A. and R.H. Wilshusen
1990 Large-scale Integrative Facilities in Tribal Societies: Cross-cultural and Southwestern US examples. *World Archaeology* 22(2):133-146.

Blanton, Richard E, Gary M. Feinman, Stephen A. Kowaleski, and Peter N. Peregrine
1996 A Dual-Processual Theory for the Evolution of Mesoamerican Civilization. *Current Anthropology* 37(1):1-14.

Blitz, John H.
1993 Big Pots for Big Shots: Feasting and Storage in a Mississippian Community. *American Antiquity* 58(1):80-95.

Cable, John S.
1997 The Ceremonial Mound Theory: New Evidence for the Possible Ceremonial Function of Shell Rings. South Carolina Archaeology Week Poster, *Shell Rings of the Late Archaic*. South Carolina Institute of Archaeology and Anthropology, University of South Carolina, Columbia.

Calmes, Alan
1967 Test Excavations at Two Late Archaic Sites on Hilton Head Island. Ms. On file, South Carolina Institute of Archaeology and Anthropology, University of South Carolina, Columbia.

DePratter, C.B.
1979 Shellmound Archaic on the Georgia Coast. *South Carolina Antiquities* 11:1-69.

DePratter, Chester B., and James D. Howard
1980 Indian Occupation and Geologic History of the Georgia Coast: a 5,000 Year Summary. In *Excursions in Southeastern Geology: The Archaeology –Geology of the Georgia Coast*, by James D. Howard, Chester B. DePratter, and Robert W. Frey, pp. 1-65. Geological Society of America, Guidebook 20. Georgia Department of Natural Resources, Atlanta.

Dietler, Michael, and Brian Hayden
2001 Digesting the Feast—Good to East, Good to Drink, Good to Think: An Introduction. In *Feasts: Archaeological and Ethnographic Perspectives on Food, Politics, and Power*, edited by Michael Dietler and Brian Hayden, pp. 1-22. Smithsonian Institution Press, Washington.

Dietler, Michael, and Ingrid Herbich
2001 Feasts and Labor Mobilization: Dissecting a Fundamental Economic Practice. In *Feasts: Archaeological and Ethnographic Perspectives on Food, Politics, and Power*, edited by Michael Dietler and Brian Hayden, pp. 240-264. Smithsonian Institution Press, Washington.

Edwards, William E.
1965 A Preliminary Report on the Sewee Mound Shell Ring, Charleston County, South Carolina. Manuscript on file, South Carolina Institute of Archaeology and Anthropology, University of South Carolina, Columbia.

Frink, Douglas S.
1995 Application of the Oxidizable Carbon Ratio Dating Procedure and Its Implications for Pedogenic Research. In *Pedologicl Perspectives in Archaeological Research*, Soil Science Society of America, Special Publication 44, pp. 95-104.

1997 OCR Carbon Dating of the Watson Brake Mound Complex. Paper presented at the 53rd Annual Meeting of the Southeastern Archaeological Conference, Birmingham, Alabama.

Ford, James B.
1966 Early Formative Cultures in Georgia and Florida. *American Antiquity* 31:781-99.

1969 *A Comparison of Formative Cultures in the Americas*. Smithsonian Contributions to Anthropology 11. Smithsonian Institution, Washington, D.C.

Gibson, Jon
2001 *The Ancient Mounds of Poverty Point: Place of Rings*. University Press of Florida, Gainesville.

Gibson, Jon, and Phillip Carr, eds.
2004 *Signs of Power: The Rise of Cultural Complexity in the Southeast*, University of Alabama Press, Tuscaloosa (in press). University of Alabama Press, Tuscaloosa.

Hayden, Brian
2001 Fabulous Feasts: A Prolegomenon to the Importance of Feasting. In *Archaeological and Ethnographic Perspectives on Food, Politics, and Power*, edited by Michael Dietler and Brian Hayden, pp. 23-64. Smithsonian Institution Press, Washington, D.C.

Hudson, Charles
1976 *The Southeastern Indians*. University of Tennessee Press, Knoxville.

Kelly, Lucretia S.
2001 A Case of Ritual Feasting at the Cahokia Site. *Archaeological and Ethnographic Perspectives on Food, Politics, and Power*, edited by Michael Dietler and Brian Hayden, pp.334-367. Smithsonian Institution Press, Washington, D.C.

Knight, Vernon James
2001 Feasting and the Emergence of Platform Mound Ceremonialism in Eastern North America. In *Archaeological and Ethnographic Perspectives on Food, Politics, and Power*, edited by Michael Dietler and Brian Hayden, pp. 311-333. Smithsonian Institution Press, Washington, D.C.

Laudonnièrre, Rene
1975 [1586] *Three Voyages*, translated by Charles Bennett.

University Presses of Florida, Gainesville.

Le Page Du Pratz, Antoine S.
1972 [1758] *The History of Louisiana*. Claitor's Publishing Division, Baton Rouge, Louisiana.

Mainfort, Robert C. and Lynne P. Sullivan
1998 Explaining Earthen Enclosures. In *Ancient Earthen Enclosures of the Eastern Woodlands*, edited by R.C. Mainfort and L.P. Sullivan, pp. 1-16. University Press of Florida, Gainesville.

Marrinan, Rochelle A.
1975 *Ceramics, Molluscs, and Sedentism: The Late Archaic Period on the Georgia Coast*. Ph.D. dissertation, Department of Anthropology, University of Florida, Gainesville.

McKinley, William
1873 *Mounds in Georgia*. Annual Report to the Board of Regents, Smithsonian Institution 22:422-428.

Milanich, Jerald T., Ann S. Cordell, Vernon J. Knight, Jr., Timothy A. Kohler, and Brenda J. Sigler-Lavelle
1997 *Archaeology of Northern Florida, A.D. 200-900: The McKeithen Weeden Island Culture*. University Press of Florida, Gainesville.

Michie, James L.
1979 *The Bass Pond Sites: Intensive Archaeological Testing at a Formative Period Base Camp on Kiawah Island, South Carolina, Columbia*. Research Manuscript Series 154, South Carolina Institute of Archaeology and Anthropology, University of South Carolina, Columbia.

Russo, M.A.
1993 *The Timucuan Ecological and Historic Preserve Phase III Final Report*. SEAC Accession Number 899. Florida Museum of Natural History, Gainesville.

1996 Southeastern Archaic Mounds. In *Archaeology of the Mid-Holocene Southeast*, edited by Kenneth E. Sassaman and David G. Anderson, pp. 259-287. University Press of Florida, Gainesville.

2002 Faunal Analysis at Fig Island. In *The Fig Island Ring Complex (38CH42): Coastal Adaptation and the Question of Ring Function in the Late Archaic*, edited by Rebecca Saunders, pp. 141-154. Report prepared for the South Carolina Department of Archives and History, Grant #45-01-16441.

Russo, M. A., and G. Heide
2001 Shell Rings of the Southeast US. *Antiquity* 75(289):491-492.

2002 The Joseph Reed Shell Ring. *The Florida Anthropologist* 55(2):67-88.

2003 *Mapping the Sewee Shell Ring*. Report submitted to the Francis Marion and Sumter National Forests, South Carolina.

Russo, Michael A., Gregory Heide, and Vicki Rolland
2002 *The Guana Shell Ring*. Report Submitted to The Florida Department of State, Division of Historical Resources, Historic Preservation Grant No. F0126.

Russo, Michael A. and Rebecca Saunders
1999 *Identifying the Early Use of Coastal Fisheries and the Rise of Social Complexity in Shell Rings and Arcuate Middens on Florida's Northeast Coast*. Report submitted the National Geographic Society under Grant #6018-97, Washington, D.C.

Sassaman, Kenneth E.
1993 *Early Pottery in the Southeast: Tradition and Innovation in Cooking Technology*. University of Alabama Press, Tuscaloosa.

Saunders, Joe W., Thurman Allen, and Roger T. Saucier
1994 Four Archaic? Mound Complexes in Northeast Louisiana. *Southeastern Archaeology* 13(2):134-153.

Saunders, Rebecca
1994 The Case for Archaic Period Mound Sites in Southeastern Louisiana. *Southeastern Archaeology* 13(2):118-134.

1999 Feast or Quotidian Fare?: Rollins Shell Ring and the Question of Site Function. Paper Presented at the 56th Annual Meeting of the Southeastern Archaeological Society, Pensacola, Florida.

2002a Previous Archaeological Research. In *The Fig Island Ring Complex (38CH42): Coastal Adaptation and the Question of Ring Function in the Late Archaic*, edited by Rebecca Saunders, pp. 43-62. Report prepared for the South Carolina Department of Archives and History, Grant #45-01-16441.

2002b Field Excavation : Methods and Results. In *The Fig Island Ring Complex (38CH42): Coastal Adaptation and the Question of Ring Function in the Late Archaic*, edited by Rebecca Saunders, pp. 98-140. Report prepared for the South Carolina Department of Archives and History, Grant #45-01-16441.

2003 *Feast or Quotidian Fare: Rollins Shell Ring and the Question of Ring Function*. Report prepared for the Florida Department Historical Resources, under permit # 1A-32 9697.04.

2004 Spatial Variation in Orange Period Pottery: Spatial Variation and Function. In *Early Pottery: Technology, Function, Style, and Interaction in the Lower Southeast*, edited by Rebecca Saunders and Chritopher T. Hays. In press, University of Alabama Press, Tuscaloosa.

Smith, Marvin T. and Mark Williams
1994 Mississippian Mound Refuse Disposal Patterns and Implications for Archaeological Research. *Southeastern Archaeology* 13(1):27-35.

Swanton, John R.
1979 [1946] *The Indians of the Southeastern United States*. Classics of Smithsonian Anthropology, Smithsonian Institution Press, Washington, D.C.

Trigger, Bruce G.
1990 Monumental Architecture: A Thermodynamic Explanation of Symbolic Behavior. *World Archaeology* 22(2);121-132.

Trinkley, Michael B.
1985 The Form and Function of South Carolina's Early Woodland Shell Rings. In *Structure and Process in Southeastern Archaeology,* edited by R.S. Dickens and H.T. Ward, pp. 102-118. University of Alabama Press, Tuscaloosa.

1997 The Lighthouse Pont and Stratton Place Shell Rings. South Carolina Archaeology Week Poster, *Shell Rings of the Late Archaic*. South Carolina Institute of Archaeology and Anthropology, University of South Carolina, Columbia.

VanDerwarker, Amber M.
1999 Feasting at Status at the Toqua Site. *Southeastern Archaeology* 18(1):24-34.

Waring, Antonio J., Jr.
1968a The Archaic and Some Shell Rings. In *The Waring Papers: The Collected Works of Antonio J. Waring, Jr.*, edited by Stephen Williams. Papers of the Peabody Museum of Archaeology and Ethnology 58:243-246.

1968b The Bilbo Site, Chatham County, Georgia. In *The Waring Papers: The Collected Works of Antonio J. Waring, Jr.*, edited by Stephen Williams. Papers of the Peabody Museum of Archaeology and Ethnology 58:152-197.

Waring, Antonio J., Jr., and Lewis H. Larson
1968 The Shell Ring on Sapelo Island. In *The Waring Papers: The Collected Works of Antonio J. Waring, Jr.*, edited by Stephen Williams. Papers of the Peabody Museum of Archaeology and Ethnology 58:263-278.